

## UIM-10/100

### Uplink Interface Module

**CAUTION** Net to Net Technologies strongly recommends the use of proper electrostatic discharge (ESD) precautions when handling this equipment.

## INSTALLATION

### 1. Unpack and inspect the equipment.

The following components should be included:

- 1 UIM-10/100
- 4 #6 Phillips Panhead Internal Locking Screws
- 2 #6 Phillips Beige Flathead Screws

If there is visible damage, do not attempt to connect the device; contact Customer Support at 1-877-638-2638 (001-603-427-0600 for international customers) or [support@nettonet.com](mailto:support@nettonet.com).

### 2. Install the UIM-10/100.

Required tool for installation: Phillips screwdriver.

#### UIM Installation in an IP DSLAM

Affix the UIM to a Multiplexer Uplink Module (MUM).

**NOTE** The UIM may be attached to a MUM that has already been in service, although you must remove the MUM from the IP DSLAM in order to do so. **Removal of a MUM from an IP DSLAM chassis that is powered up will not affect the operational status of other modules within the chassis; it will, however, disengage the IP DSLAM's upstream network connection.**

- Place the MUM on a flat surface with the circuit board facing up.
- Select a port on the MUM for UIM installation; either port (1 or 2) may be used. Although not required for operational purposes, if redundancy is desired, two UIMs may be installed on the MUM, one in each port.

- c. Remove the blanking plate\* from the selected port.
- d. Carefully slide the faceplate of the UIM under the lip of the MUM faceplate at the selected port opening such that the UIM circuit board is facedown and the UIM label shows through the port opening with the model name along the right-hand edge.
- e. Ensure the mounting holes on the UIM are lined up with the corresponding pems on the MUM and the board-to-board connector key pins are properly aligned.
- f. Gently press down with even pressure on all four corners of the UIM until the board-to-board connector is fully seated.
- g. Secure the boards together at the pems with the (4) provided panhead screws.
- h. Secure the UIM faceplate to the MUM faceplate using the (2) provided beige flathead screws.

**CAUTION** \*Blanking plates should be stored for possible future use. If a UIM is removed from a MUM, it must be replaced with either another UIM or a blanking plate. DO NOT INSTALL A MUM WITH AN EMPTY UIM PORT INTO AN IP DSLAM.

#### Install the MUM in an IP DSLAM chassis.

The IPD12000 is a fourteen slot chassis; slots 1-12 are reserved for Access Modules and slots 13-14 are reserved for Multiplexer Uplink Modules (MUMs). The IPD4000 is a five slot chassis; slots 1-4 are reserved for Access Modules and slot 5 is reserved for a MUM.

- a. Align the MUM with the slot module guides of the chosen slot for installation (either slot 13 or 14 on the IPD12000 or slot 5 on the IPD4000).
- b. Slide the MUM firmly into the chassis. DO NOT USE EXCESS FORCE.
- c. Tighten the fastening screws on the MUM faceplate.
- d. Verify that the PWR (Power) LED on the MUM faceplate is illuminated.

#### UIM Installation in a Mini DSLAM

**CAUTION** Disconnect all power sources from the Mini DSLAM before installing the UIM.

- a. Remove the (8) screws securing the Mini DSLAM chassis and carefully lift off the chassis cover. Set the screws aside.
- b. Select a port on the Mini DSLAM for UIM installation; either port (1 or 2) may be used. Although not required for operational purposes, if redundancy is desired, two UIMs may be installed in the Mini DSLAM, one in each port.

- c. Remove the blanking plate\* from the selected port.
- d. Carefully slide the faceplate of the UIM under the inside lip of the Mini DSLAM at the selected port opening such that the UIM circuit board is facedown and the UIM label shows through the port opening with the model name along the right-hand edge.
- e. Ensure the mounting holes on the UIM are lined up with the corresponding pems on the Mini DSLAM board and the board-to-board connector key pins are properly aligned.
- f. Gently press down with even pressure on all four corners of the UIM until the board-to-board connector is fully seated.
- g. Secure the boards together at the pems with the (4) provided panhead screws.
- h. Secure the UIM faceplate to the front of the Mini DSLAM chassis using the (2) provided beige flathead screws.
- i. Replace the Mini DSLAM chassis cover and secure with the original (8) screws.

**CAUTION** \*Blanking plates should be stored for possible future use. If a UIM is removed from a Mini DSLAM, it must be replaced with either another UIM or a blanking plate. DO NOT OPERATE A MINI DSLAM WITH AN EMPTY UIM PORT.

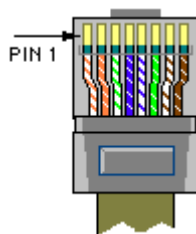
### 3. Establish the Ethernet connection.

The Ethernet port is 10/100 auto-negotiating. Net to Net Technologies recommends that you set your hub, switch, etc. to auto-negotiate (if applicable) before making the Ethernet connection. Plug the Ethernet cable into the Ethernet RJ45 port on the UIM faceplate. Verify the connection; solid illumination of the Lnk LED on the UIM faceplate indicates an Ethernet link has been established. If the Lnk LED is illuminated but not the 100 LED then a 10 Mbps link has been established. If the 100 LED is also illuminated, then a 100 Mbps link has been established.

**NOTE** For most applications, the UIM-10/100 connects to a router or a PC using a **straight-through Ethernet cable** and to a hub or a switch using a **crossover Ethernet cable**. For any other connection combinations you must verify the pinout of the Ethernet device into which you are connecting the UIM-10/100 in order to determine which type of cable is required.

Ethernet RJ45 Port Pinout

Pin 1	RX+	Pin 5	not used
Pin 2	RX-	Pin 6	TX-
Pin 3	TX+	Pin 7	not used
Pin 4	not used	Pin 8	not used



## Additional Information

### LED Indicators

LED	State	Indication	Additional Information
100	solid green	Fast Ethernet connection (100 Mbps) is established	If the 100 LED is illuminated, the Lnk LED will also be illuminated.
	no illumination	no Fast Ethernet connection	If the 100 LED remains unlit but the Lnk LED is illuminated then a link has been established at 10 Mbps rather than 100 Mbps.
Act	flashing amber	Ethernet activity	Traffic is flowing without any problems.
	solid amber	heavy traffic	
	no illumination	no Ethernet activity	Either there is no Ethernet link or a link exists but there is no activity.
Lnk	solid green	Ethernet connection is established	If the Lnk LED is illuminated but not the 100 LED then a 10 Mbps link has been established. If the 100 LED is also illuminated, then a 100 Mbps link has been established.
	no illumination	no Ethernet connection	The 100 and Act LEDs will remain unlit by default.

### Regulatory Compliance

The following regulatory compliance information applies to the UIM-10/100 as installed in a Mini DSLAM chassis or as affixed to a MUM installed in an IP DSLAM chassis.

#### FCC Regulatory Compliance Information for Class A Equipment

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Caution: Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

#### Industry Canada Regulatory Compliance Information for Class A Equipment

This Class A digital apparatus complies with Canadian ICES-003.  
Cet appareil numérique de la Classe A est conforme à la norme NMB-003 du Canada.

## European Regulatory Compliance Information for Class A Equipment

This Class A product complies with European Norm EN55022.

Warning: In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures to correct the situation.

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